# **Defense Information Infrastructure (DII)**

**Common Operating Environment (COE)** 

Software Version Description (SVD) for the Kernel Version 3.2.0.0 Patch 1 (Windows NT 4.0)

**Document Version 1.0** 

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Prepared for:

**Defense Information Systems Agency** 

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# 1. Scope

#### 1.1 Identification

This Software Version Description (SVD) describes the Defense Information Infrastructure (DII) Common Operating Environment (COE) Kernel Version 3.2.0.0 Patch 1 (Windows NT). The DII COE Kernel Version 3.2.0.0 Patch 1 is intended to be used on computers running the Windows NT 4.0 Operating System.

The DII COE Kernel is a Government off-the-shelf (GOTS) package.

**NOTE:** Throughout this document, Courier font is used to indicate entries to be typed at the keyboard, NT commands, file and directory names, and screen text. For example:

This file is located in the DII\_DEV directory.

# 1.2 System Overview

The Defense Information Infrastructure (DII) Common Operating Environment (COE) will normally make available a large number of segments, not all of which are required for every application. The DII COE kernel is the minimum set of software required on every workstation regardless of how the workstation will be used.

The DII COE Kernel for the Windows NT environment includes the following components:

**COEAskUser runtime tool Version 1.0.0.9**—This tool is intended for use in the PostInstall script to display a message to the user and to have the user click on a Yes or No button. The parameters allow the calling routine to specify the labels to be used for the Yes/No buttons.

**COEFindSeg runtime tool Version 1.0.0.9**— This tool returns information about a requested segment.

**COEInstaller runtime tool Version 1.0.0.12**—This tool is used to support the segment installation process. The COEInstaller tool displays a list of segments that may be installed from a mapped drive, floppy diskette, or CD-ROM. The COEInstaller tool normally is executed by an operator who selects it from the DII Administrator program manager group.

**COEInstError runtime tool Version 1.0.0.9**— This tool allows a segment to display an error message to the user from within a PreInstall, PostInstall, or DeInstall script and terminate installation processing for the segment.

**COEMsg runtime tool Version 1.0.0.9**— This tool is intended to be used by PreInstall, PostInstall, and DeInstall scripts to have an informational message displayed to the user.

**COEPrompt runtime tool Version 1.0.0.9**— This tool is intended to be used by PreInstall, PostInstall, or DeInstall scripts to have an informational message/query displayed to the user and have the user respond.

**COEPromptPasswd runtime tool Version 1.0.0.9**— This tool is intended to be used in PreInstall and PostInstall scripts to prompt a user to enter a password.

The DII COE Integration and Runtime Specification and the DII COE System Administrator's Guide (Windows NT 4.0) provide a description of the COEInstaller tool and its functionality.

For DII COE Kernel Version 3.2.0.0 Patch 1 related issues, contact the DII COE Hotline at the OSF support Center (OSC) by one of the following methods:

- C Telephone (703) 735-8681
- C Facsimile (703) 735-3080
- C Web site: http://spider.osfl.disa.mil/dii/hotline/index.html.

### 1.3 Product Information

**Product Qualification:** The DII COE Kernel Version 3.2.0.0 Patch 1

(Windows NT 4.0) was validated and accepted by the INRI Engineering Group (Chesapeake, Virginia) in accordance with the *Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Test Plan (STP) for Kernel Version 3.2.0.0* Patch 1, Document Control No. DII.3200.NT40.Kernel.P1.STP-1, November 14, 1997. The qualification that the segment is ready for delivery was issued at the INRI DII COE Kernel Version 3.2.0.0 Patch 1 Delivery Readiness Review on November 13, 1997.

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Rights Reserved. This material may be reproduced by or for the U.S. Government pursuant to the copyright license under the clause at DFARS 252.227-703 (OCT 1988). No other licenses are required for using this software. No

freeware or shareware is included.

**Product Dependencies:** The DII COE Kernel Version 3.2.0.0 Patch 1 requires the

DII COE Kernel Version 3.2.0.0 and the Windows NT 4.0

Operating System. No implementation constraints or

limitations on system configuration apply.

## 2. Referenced Documents

The following documents are referenced in this Software Version Description (SVD):

- C DII.3200.NT40.Kernel.P1.SVD-1, Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Version Description for Kernel Version 3.2.0.0 Patch 1 (Windows NT 4.0), Document Version 1.0, November 14, 1997
- C DII.3200.NT40.Kernel.P1.IP-1, Defense Information Infrastructure (DII)
  Common Operating Environment (COE) Installation Procedures for Kernel
  Version 3.2.0.0 Patch 1 (Windows NT 4.0), Document Version 1.0, November 14,
  1997
- C DII.3200.NT40.Kernel.P1.STP-1, Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Test Plan for Kernel Version 3.2.0.0 Patch 1 and Developer's Toolkit Version 3.2.0.1 (Windows NT 4.0), Document Version 1.0, November 14, 1997
- C DII.3200.NT40.Kernel.P1.STD-1, Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Test Description for Kernel Version 3.2.0.0 Patch 1 and Developer's Toolkit Version 3.2.0.1 (Windows NT 4.0), Document Version 1.0, November 14, 1997
- C DII.3200.NT40.Kernel.P1.STR-1, Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Test Report for Kernel Version 3.2.0.0 Patch 1 and Developer's Toolkit Version 3.2.0.1 (Windows NT 4.0), Document Version 1.0, November 14, 1997

- C DII.3200.NT40.AG-1, Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.2.0.0 System Administrator's Guide (Windows NT 4.0), June 13, 1997
- C DII COE I&RTS:Rev 3., Defense Information Infrastructure (DII) Common Operating Environment (COE) Integration and Runtime Specification, Document Version 3.0, July 1997.

# 3. Version Description

### 3.1 Inventory of Materials Released

<u>Magnetic media</u>: Two copies of one 3.5" floppy diskette containing the DII COE Kernel Version 3.2.0.0 Patch 1 packaged as a DII COE Patch segment for Windows NT 4.0.

<u>Soft-copy Documentation</u>: A 3.5" floppy diskette (WordPerfect 6.0 for Windows format) for each of the following documents:

- C DII.3200.NT40.Kernel.P1.SVD-1, Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Version Description for Kernel Version 3.2.0.0 Patch 1 (Windows NT 4.0), Document Version 1.0, November 14, 1997
- C DII.3200.NT40.Kernel.P1.IP-1, Defense Information Infrastructure (DII) Common Operating Environment (COE) Installation Procedures for Kernel Version 3.2.0.0 Patch 1 (Windows NT 4.0), Document Version 1.0, November 14, 1997
- C DII.3200.NT40.Kernel.P1.STP-1, Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Test Plan for Kernel Version 3.2.0.0 Patch 1 and Developer's Toolkit Version 3.2.0.1 (Windows NT 4.0), Document Version 1.0, November 14, 1997
- C DII.3200.NT40.Kernel.P1.STD-1, Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Test Description for Kernel Version 3.2.0.0 Patch 1 and Developer's Toolkit Version 3.2.0.1 (Windows NT 4.0), Document Version 1.0, November 14, 1997

C DII.3200.NT40.Kernel.P1.STR-1, Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Test Report for Kernel Version 3.2.0.0 Patch 1 and Developer's Toolkit Version 3.2.0.1 (Windows NT 4.0), Document Version 1.0, November 14, 1997.

<u>Hard-copy Documentation</u>: Two hard copies of the aforementioned documents.

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## 3.2 Inventory of Software Contents

File Name	Version	Date
/COEAskUser.exe	1.0.0.9	November 13, 1997
/COEFindSeg.exe	1.0.0.9	November 13, 1997
/ COEInstaller.exe	1.0.0.12	November 13, 1997
/ COEInstError.exe	1.0.0.9	November 13, 1997
/ COEInstError.exe	1.0.0.9	November 13, 1997
/COEMsg.exe	1.0.0.9	November 13, 1997
/COEPrompt.exe	1.0.0.9	November 13, 1997
/COEPromptPasswd.exe	1.0.0.9	November 13, 1997

# 3.3 Changes Installed

The DII COE Kernel Version 3.2.0.0 Patch 1 for Windows NT 4.0 encompasses the following changes:

- C Multiple account groups are supported. That is, a segment can now belong to more than one account group.
- C COEInstaller disk space reserve now works correctly. The COEInstaller tool properly processes the Reserve field of the \$DISK descriptor in the segment's SegInfo file.
- C 4-digit years are accepted in the \$Version descriptor. Year values containing less than 4 digits result in warning messages. Year values containing more than 4 digits are not accepted.

- C The COEInstaller tool has been modified to force the operator to click the mouse to set focus to message box windows that are displayed following PreInstall, PostInstall, and DeInstall and other COEInstaller processing. This ensures that the message boxes are not accidentally dismissed.
- C PreInstall, PostInstall, and Deinstall return statuses are now handled correctly. A negative return status indicates failure to the COEInstaller and is handled per design.
- C Deinstallation of account groups no longer leaves local profile files dangling.

These changes were made in response to the Software Trouble Reports shown in the table below. They are listed in order of INRI Number.

#### DII COE Kernel Version 3.2.0.0 Patch 1 (Windows NT 4.0) Software Trouble Reports

**Total Software Changes: [6]** 

INRI Number: RTO00001645

Agency Number: D70367

**Short Description**: The Reserved field of \$DISK is not working correctly.

**Long Description**: An ORACLE client segment was built with the following entry in the SegInfo file: \$DISK:5100:3000000. 300MB was to be reserved. Prior to installation, the Reserved field of the Available Disks panel in the COEInstaller window showed 291.33 MB for the targeted disk. After installation of the ORACLE Client segment, the "Reserved" field still showed 281.33 MB. Apparently, the Reserved field of \$DISK is not working correctly. 300MB should have been added to the 281.33MB value.

#### DII COE Kernel Version 3.2.0.0 Patch 1 (Windows NT 4.0) Software Trouble Reports

INRI Number: RTO00001646

**Agency Number**: D70368

**Short Description**: Multiple account groups cannot be specified.

**Long Description**: Page 5-94 of the I&RTS that the user may have "one or more \$SEGMENTS lines" in the SegName file, which would allow the segment to belong to more than one account group. It appears, however, that only the first \$SEGMENT is recognized when a segment is loaded.

INRI Number: RTO00001741

**Agency Number**: D70492

**Short Description**: Four-digit years.

**Long Description**: Page 5-98, the 'Note:' states that four-digit years are permitted and that VerifySeg will issue a warning for any segment that uses less that 4 digits. The VerifySeg issues an error if you attempt to use four-digit years.

INRI Number: RTO00001744

**Agency Number**: D70424

**Short Description**: COEPrompt can be terminated with a carriage return.

Long Description: The COEPrompt tool, at this time, can present a fairly dangerous situation in some instances. As with all DII Message tools, when they are displayed on the screen, they automatically become the active window. In many instances, the machine's operator is multitasking (i.e., running xterms, Segment Installer, Netscape, etc. concurrently) and is working specifically within a window. If the operator was working in an xterm and hit the <Enter> key, (meant for the Xterm) at the instant that a COEPrompt appeared on the screen, then the COEPrompt would assume that this keystroke (<Enter>) was the information that the operator meant to give. This can be fatal to some installs (i.e., Informix at the prompt for licensing information).

It is recommended that the COEPrompt be terminated only by the operator's mouse choosing the "OK" button.

#### DII COE Kernel Version 3.2.0.0 Patch 1 (Windows NT 4.0) Software Trouble Reports

INRI Number: RTO00001829

**Agency Number**: D70562

**Short Description**: The Installation of an account group causes more than just the account group segment to be

loaded.

Long Description: The installation of an account group causes more than just the account group segment to be loaded. It causes the account groups database to be updated and a default profile to be created in the /h/USERS/(global and =Local)/Profiles directory. However, the default profile is not created in the profiles database and hence requires manual creation, even though its directory is already created. Regardless of this dilemma, when the account group is de-installed, many residue components are left behind. The account group segment is removed and all data created by the segment is removed, but the DII COE leaves many of its created elements behind.

#### For example:

- 1) The default profile and any derived profiles remain in the ...local/Profiles directory and also in the .../global/Profiles directory. The global area is more of an issue, but DII COE should build in a mechanism that would allow global profiles to be removed when the last account group segment instance is removed from the system
- 2) /h/COE/data/types/C/\*.dt files, which are created for the account group segment, still exist
- 3) /h/COE/data/Local/ProfileList still contains profile information of the account group just removed.

As a result of the residue, when the segment is reinstalled duplicate entries are made, in particular, duplicate entries to the LocalProfileList.

INRI Number: RTO00001926

**Agency Number**: D71190

Short Description: COEInstError is not leading to halting of tool processing when run in PreInstall.

**Long Description**: COEInstError is not leading to halting of tool processing when run in PreInstall. For example, call COEInstError from within a segment's PreInstall script and then run COEInstaller or TestInstall. Despite the COEInstError, the segment is still installed. Note that COEInstError when run from PostInstall or DEINSTALL does lead to COEInstaller, TestInstall, and TestRemove not installing/deinstalling the segment.

Also reference GSPR# D70783

# 3.4 Waivers

The following document waivers have been approved since these documents do not apply to the Kernel Printer Driver, which is a data segment. References to other documents are provided as applicable below:

- C Software Product Specification (SPS)
- C Database Design Document (DBDD)
- C System Administrator's Manual (SAM): See the *DII COE Version 3.2.0.0 System Administrator's Guide (Windows NT 4.0)*. No software changes between Version 3.2.0.0 and Version 3.2.0.0 Patch 1 affect system administration.
- C User's Manual (UM)/Operator's Manual (OM): No waiver requested. This manual does not apply to the Windows NT Kernel or its patches.
- C Programmer's Manual (PM): See the *DII COE Version 3.2.0.0 Programming Guide (Windows NT 4.0)*. No software changes between Version 3.2.0.0 and Version 3.2.0.0 Patch 1 affect this manual.
- C API Reference Manual (APIRM): See the *DII COE Version 3.2.0.0 API Reference Guide (Windows NT 4.0)*. No software changes between Version 3.2.0.0 and Version 3.2.0.0 Patch 1 affect this manual.
- C Software Test Plan (STP): The STP will cover both kernel and DTK testing.
- C Software Test Description (STD): The STD will cover both kernel and DTK testing.
- C Software Test Report (STR): The STR will cover both kernel and DTK testing.
- C Software Test Description (STD): Since the Printer test procedures delivered with the DII COE 3.2 Kernel were used for testing, the previously delivered documentation is referenced in the *Defense Information Infrastructure (DII)*Common Operating Environment (COE) Software Test Plan (STP) for Kernel Printer Driver Segment Version 1.0.0.0 and in the Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Test Report (STR) for Kernel Printer Driver Segment Version 1.0.0.0, Document Control No. DII.HPSol.Printer.1000.STR-1.

# 3.5 Adaptation Data

None.

### 3.6 Installation Instructions

For instructions on installing this DII COE kernel patch, refer to the *Defense Information Infrastructure (DII) Common Operating Environment (COE) Installation Procedures for Kernel Version 3.2.0.0 Patch 1 (Windows for NT 4.1)*. This patch requires the system to already be loaded with the DII COE Kernel Version 3.2.0.0 (Windows NT 4.0).

The DII COE Kernel Version 3.2.0.0 Patch 1 requires 1.1 MB of disk space, in addition to the space already required by the DII COE Kernel Version 3.2.0.0.

### 3.7 Possible Problems and Known Errors

There are no known problems or errors.

### 4. Notes

This section provides user release notes related to the DII COE Kernel Version 3.2.0.0 Patch 1.

### 4.1 Kernel Release Notes

Refer to the DII COE Version 3.2.0.0 Software Version Description for Kernel Version 3.2.0.0 Patch 1 (Windows NT 4.0) for more information about the DII COE Kernel Version 3.2.0.0.